

# **Exhibit A**

# **Scope of Work**

# **and**

# **Specifications**

**Bid Log Number 2011-01**

**2011 Batiquitos Lagoon Maintenance  
Dredging Project**

**September 1, 2011**

**State of California  
California State Lands Commission  
100 Howe Avenue, Suite 100 South  
Sacramento, California 95825-8202**

PART 1 – GENERAL

1.1 WORK INCLUDED

The work of this Section consists, in general, of furnishing transportation, labor, materials, equipment, and incidentals necessary to perform the work including but not limited to the following:

- A. Secure any necessary permits as may be required under Section 01575, “Temporary Environmental Controls.”
- B. Dredging and Placement of maintenance sand, and implementation of erosion maintenance and repairs as specified in Section 02325, “Earthwork/Dredging”. Dredge may be a diesel, diesel/electric, or electric cutter-suction pipeline dredge and must be a fixed ladder 12-inch or greater size class.
- C. Site cleaning and removal of debris, equipment, and excess material upon completion of work.
- D. Incidental work as shown on Drawings specified or directed by the Owner’s Representative.

1.2 WORK BY OTHERS

Not Applicable

1.3 DEFINITIONS

- |    |                            |  |
|----|----------------------------|--|
| A. | Contractor                 | - Prime Construction Contractor                |
| B. | Owner                      | - California Department of Fish & Game (CDFG)  |
| C. | Contracting Officer        | - David Brown, Chief, Administration/CIO, CSLC |
| D. | Ecological Reserve Manager | - Warren Wong, CDFG                            |
| E. | Owner’s Representative     | - On Site Representative of the CDFG/CSLC      |
| F. | Project Manager            | - Keith Merkel, Merkel & Associates            |
| G. | Project Engineer           | - Walter Crampton, TerraCosta Consulting Group |

1.4 TIME OF COMPLETION AND LIQUIDATED DAMAGES

- A. The total time for completion will be 120 calendar days from the Notice to Proceed (NTP), not to exceed March 1, 2012.
- a. Mobilization or placement of sand on Carlsbad State Beach shall occur outside of the summer season Memorial Day weekend through Labor Day of any given year.
  - b. To avoid potential impacts to the California least tern and western snowy plover breeding period, construction shall not be permitted to occur from March 1 through August 31 of any year.
- B. There will be liquidated damages assessed as follows:
1. For each day beyond 21 calendar days from NTP the dredging plan, schedule, and initial hydrographic survey are delayed, \$1000 dollars will be assessed.
  2. For each day beyond 60 calendar days from NTP the dredging is delayed, \$5,000 dollars will be assessed.
  3. Liquidated damages shall be concurrent.
- C. This provision specifies the procedure for determination of time extensions for unusually severe weather. In order for the Owner's Representative to award a time extension the following conditions must be satisfied:
1. The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.
  2. The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor. Further weather conditions must be of a nature that would normally delay dredging work in a protected environment.

The following schedule of monthly anticipated adverse weather delays is based upon National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations, The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

**MONTHLY ANTICIPATED ADVERSE WEATHER DAYS**

Work Days Based on Five (5) Day Work Week

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
5	4	3	1	0	0	0	0	0	0	1	3

Upon acknowledgement of the Notice to Proceed and continuing throughout the contract, the Contractor will record on the daily QC report the occurrence of adverse weather delays-days must prevent work on critical activities for 50 percent or more of

SECTION 01110  
SUMMARY OF WORK

the Contractor's scheduled workday. The number of actual –adverse weather days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated, the Owner's Representative will convert any qualifying days to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification.

PART 2 – PRODUCTS

Not Applicable

PART 3 – EXECUTION

Not Applicable

PART 4 – MEASUREMENT & PAYMENT

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION

PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this Section consists, in general, of furnishing all labor, materials, tools, equipment, and incidentals complete and in place as indicated on the Drawings and as specified and doing all the work involved in complying with permit restrictions.

1.2 SUBMITTALS

The following Preconstruction Submittals shall be submitted in accordance with Section 01330, "Submittal Procedures"

- A. Parking and Field Office Placement
- B. Contractor Regulations
- C. Spill Prevention and Response Plan
- D. Contractor's Health and Safety Plan
- E. Watercraft List (equipment used for materials or personnel transport)
- F. Storm Water Pollution Prevention Plan
- G. Transportation Plan/ Traffic Control Plan for Mobilization/Demobilization
- H. Construction Practices and Safety Measures and Site Specific Hazards Analysis
- I. Best Management Practices
- J. Local Mariner's Notification
- K. Air Quality Conformity Determination and Local/Regional Air Permits

1.3 SPECIAL SCHEDULING REQUIREMENTS

- A. Have materials, equipment, and personnel required to perform each segment of the work at the site prior to the commencement of the work. Mobilization includes the delivery, assembly of the dredge, and placement of 10,000 cubic yards of sand via dredge discharge line on the beach nourishment site.
- B. The Pacific Coast Highway, La Costa Avenue and the La Costa Park & Ride Lot, Ponto State Beach, and the NCTD railroad facilities will remain in operation during the entire construction period. The Contractor shall conduct its operations so as to cause no interference with normal operations of these activities. Contractor is responsible for acquisition of right-of-entry permits and insurance requirements for work in public rights of way.
- C. Permission to interrupt any site traffic or access shall be requested in writing a minimum of 15 calendar days prior to the desired date of interruption and will not be granted except for brief periods to move large equipment in or out of the work site. Any local permits, traffic control condition compliance, flaggers and other traffic control measures are the responsibility of the Contractor.

- D. The work under this contract requires special attention to the scheduling and conduct of the work in connection with tides, existing operations, and public convenience. Identify on the construction schedule each factor that constitutes a potential interruption to these activities.

1.4 CONTRACTOR ACCESS AND USE OF PREMISES

- A. **Site Requirements**  
Ensure that Contractor personnel employed on the work are familiar with and obey regulations including safety, fire, traffic and security regulations. Keep within the limits of the work and avenues of ingress and egress. The Contractor's equipment shall be conspicuously marked for identification.
- B. **Special Requirements for Work Outside the State Ecological Reserve**  
Before starting any work, Contractor must complete a videotape survey documenting the conditions of the La Costa Park & Ride pavement, curbs, and landscaping where the dredge is to be transited to the site. The Contractor shall also document the conditions of the State Parks pull-off parking, placement of barriers, and any improvements. Contractor shall also document the conditions of the Leucadia Wastewater District pump station pullout and facilities. A copy of this video shall be delivered to the Owner's Representative prior to commencement of site work and shall be the standard for required protection or repair of any facilities under this Contract.
- C. **DMV Employer Pull Notice Program**  
Contractor employees who operate vehicles or heavy equipment on the project must have a valid driver's license. Contractor should have a management system to ensure that this requirement is met. Contractor could meet the requirement by using the State of California Department of Motor Vehicles Employer Pull Notice Program. The program is offered to any employer interested in identifying an employee (driver):
1. Whose license has been revoked; or
  2. Who does not have a current driver's license (Class 1/A, 2/B, 3/C)

For a fee, the Department of Motor Vehicles will issue a driving record printout for each employee. The DMV will automatically generate a driving record report at least every 6 to 12 months for each employee. The DMV will use the report to identify employees who do not have a current and valid driver's license.

Regardless of the system used, Contractor must not allow employees to operate a motor vehicle on the project until they can prove they have a valid driver's license.

- D. Accident Reporting  
Contractor is required to immediately report any and ALL accidents (that occur on the project) to the Owner's Representative who is supervising the work. Contractor is required to submit a written accident report to the Owner's Representative within 24 hours of the accident.
- E. Spill Reporting  
Contractor shall notify Owners Representative, the Ecological Reserve Manager and the local Fire Department in addition to the legally required Federal, State, and local reporting channels (including the National Response Center, 1-800-424-8802) if a reportable quantity is released to the environment.
- F. Working Hours  
There are no limits on working hours except as cited in the permits. Should any pile driving operations be required, such operations shall be confined to the period between 7 a.m. and 7 p.m., Monday through Saturday, exclusive of holidays, unless otherwise authorized by Owner's Representative.

During periods of darkness, the different parts of the work shall be lighted in a manner approved by the Owner's Representative.

#### 1.5 SECURITY REQUIREMENTS

Contractor shall keep the site perimeter secure at all times. Provide temporary closures as required to maintain security as directed by the Owner's Representative, including temporary continuous caution fencing around the beach discharge point and around beach equipment area.

Do not park on or block the site entrances or transit routes at any time. On-site parking will be allowed only within the designated staging areas, the Contractor's work zone on the beach or other areas as designated by agreement with the Owner's Representative. Parking of private vehicles within these areas will only be allowed during approved hours of work. Parking in the Beach Parking Lot will only be allowed for workers engaged in activities related to the beach nourishment and only during approved hours of work. Any required payment for parking will be the responsibility of the Contractor.

#### PART 2 - PRODUCTS

Not used.

#### PART 3 - EXECUTION

Not used.

PART 4 – MEASUREMENT & PAYMENTS

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION

PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists, in general, of conforming to the various requirements specified.

1.2 REFERENCE SPECIFICATIONS

Unless otherwise stated in these specifications, the Reference Specification shall be the 2009 edition of the Standard Specifications for Public Works Construction (Greenbook).

1.3 SUBMITTALS

The following shall be submitted in accordance with Section 01330 "Submittal Procedures":

1. List of contact personnel
2. View location map
3. Progress, pre-construction and completion photographs
4. Insurance (submitted with contract when executed)
5. Personnel list
6. Vehicle list
7. Spill Contingency Plan including provision to contact responsible parties: State Lands Commission, Department of Fish & Game Ecological Reserve Manager, Owner's Representative, required State and Federal response parties, and local hazardous material company.

1.4 MINIMUM INSURANCE REQUIREMENTS

Procure and maintain during the entire period of performance under this contract minimum insurance coverage as defined in the Invitation for Bid including:

1. Commercial liability insurance
2. Worker's compensation as required by Federal and State workers' compensation and occupational disease laws
3. Vehicle liability insurance coverage as required by California law
4. Others as required by State of California law

1.5 CONTRACTOR PERSONNEL REQUIREMENTS

- A. Subcontractors and Personnel  
Furnish a 24-hour list of contact personnel of the Contractor and subcontractors including addresses and telephone numbers for use in the event of an emergency.

As changes occur and additional information becomes available, correct and change the information contained in previous lists.

**B Vehicle List**

Submit an original list of vehicles to be utilized at the work site with the following information for each vehicle:

1. Make
2. Year
3. Model
4. License number
5. Registered owner

**1.6 SUPERVISION**

Have at least one qualified supervisor capable of reading, writing, and conversing fluently in the English language on the job site during all working hours. In addition, if a Quality Control (QC) representative is required on the contract, then that individual shall also have fluent English communication skills.

**1.7 PRECONSTRUCTION CONFERENCE**

After award of the contract but prior to commencement of any work at the site, meet with the Owner's Representative to discuss and develop a mutual understanding relative to the administration of the value engineering and safety program, preparation of the schedule prices, shop drawings, and other submittals, scheduling programming, and prosecution of the work. Major subcontractors who will engage in the work shall also attend.

**1.8 AVAILABILITY OF CADD DRAWING FILES**

- A. CADD files for the required work shall be made available to the Contractor for the expressed purpose of facilitating work under this contract.
- B. Use of these CADD files does not relieve the Contractor of duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate the work of all contractors for the project.
- C. If the Contractor uses, duplicates and/or modifies these electronic CADD files for use in producing construction data related to this contract, all previous indication of ownership (seals, logos, signatures, initials and dates) shall be removed and Contractor shall take full responsibility for the drawings.

**PART 2 - PRODUCTS**

Not used.

PART 3 - EXECUTION

Not used.

PART 4 – MEASUREMENT & PAYMENTS

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made therefore.

END OF SECTION

PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists, in general, of furnishing labor, materials, and equipment for preparation, submittal, and updating of the project schedules and reports.

1.2 CONTRACT DELIVERABLES

- A. Prepare and submit to the Owner's Representative via email for review and approval the schedules and reports per Table 1. Reporting Frequency of Schedules and Reports.
- B. Failure of Contractor to prepare, submit, and update the schedules and reports, in a timely, accurate manner and in accordance with the requirements of this Section will result in costs to the Owner which are difficult if not impossible to determine; therefore the Owner shall assess liquidated damages in the amount of \$200 per calendar day, for every work day the schedule or report submittal, revision, or resubmittal is late. This amount shall be subtracted from any monies due and shall be forfeited by the Contractor.
- C. The monthly Schedules and Reports are due and shall be delivered to the Owner's Representative on the first day of the month or first working day thereafter.

1.3 SCHEDULING SYSTEM/METHODOLOGY

- A. Contractor shall develop and maintain the overall Detailed Project Schedule. The Detailed Schedule will be reviewed and approved by the Owner's Representative for general consistency with the Contract requirements. Contractor shall not modify, change, or update the Detailed Baseline Project Schedule or any activities therein without the prior written approval of the Owner's Representative.
- B. The scheduling method used shall be Critical Path Method (CPM) format using timescaled precedence diagramming methods. The schedules shall be time-scaled in calendar days from the Notice to Proceed. The schedule shall clearly delineate construction activities for each phase.

<b>Table 1</b> <b>Reporting Frequency of Schedules and Reports</b>			
<b>Description Schedule or Report</b>	<b>Reporting Frequency</b>		<b>Monthly</b>
	<b>Within 21 Calendar Days After Notice of Award</b>	<b>Within 45 Calendar Days After Notice to Proceed</b>	
1. Summary Schedule	X		X
2. Preliminary 60-Day Schedule	X		
3. Detailed Project Schedule		X	X
4. Schedule Narrative		X	X
5. Variance Report			X
6. Equipment Schedule		X	X

#### 1.4 PRELIMINARY 60-DAY SCHEDULE

- A. Contractor shall prepare a preliminary 60-Day Schedule covering the first 60 calendar days following Notice to Proceed (NTP) as well as a general approach for the remainder of the work. This Preliminary 60-Day Schedule shall be submitted within 21 calendar days after Notice of Award. The Owner's Representative will review and respond with acceptance or direction to amend and resubmit. Contractor shall resubmit the amended schedule within 7 calendar days of receipt of Owner's Representative's comments.
- B. The schedule shall show work tasks that will or may affect completion dates including but not limited to planning, mobilization, key shop drawing, and sample submittals, fabrication and delivery of key and long-lead procurement elements. It shall also identify work items or milestones that will or may affect, or be affected by, activities of State Parks, Leucadia Wastewater District, Caltrans, NCTD, utilities, and/or other third parties. Construction activities shall later be incorporated into the Detailed Construction Schedule, including requested revisions.

#### 1.5 SUMMARY SCHEDULE

- A. Submit a Summary Schedule to the Owner's Representative for review not later than 21 calendar days after Notice of Award. Use the schedule of prices as defined in the

Request for Proposal to define the major construction activities. The schedule shall be in bar chart format, timescaled, with critical path identified. The schedule shall be time-scaled in calendar days from the Notice to Proceed. The schedule shall clearly delineate construction activities for each phase.

- B. Submit an updated Summary Schedule monthly. Indicate percent complete for each activity, a graphic depiction of schedule delays from Summary Baseline Schedule activities and milestones, the activity line darkened with the progress and the reporting cutoff date lined vertically through the schedule.

#### 1.6 DETAILED PROJECT SCHEDULE

- A. Submit to the Owner's Representative for review and approval a Detailed Project Schedule not later than 45 calendar days after the Notice to Proceed. A clear delineation of construction activities in phases is required. Upon receipt of comments by the Owner's Representative, a meeting will be held between the Owner's Representative, the Contractor, and all major subcontractors and suppliers to resolve any conflicts between the Detailed Project Schedule and the intent of the Contract. Contractor shall resubmit the amended Detailed Project Schedule 7 calendar days after receipt of Owner's Representative's comments.
- B. Comments made by the Owner's Representative on the Detailed Project Schedule, during review, will not relieve the Contractor from compliance with requirements of the Contract Documents. To the extent that there are any conflicts between the approved schedule and the requirements of the Contract Documents, the Contract Documents shall govern. Acceptance by the Owner's Representative of the Contractor's baseline schedule shall not relieve the Contractor of the responsibility for accomplishing the work within each and every intermediate Contract Milestone and completion date. Errors and/or omissions in the accepted baseline schedule, or in subsequent updates thereof, shall not excuse performance which is not in compliance with the Contract. Acceptance of a schedule update showing negative float shall not be construed as approval of a contract time extension. Acceptance by the Owner's Representative in no way makes the Owner's Representative an insurer of the baseline schedule's success or liable for time or cost overruns.
- C. The work activities comprising the Detailed Project Schedule shall be detailed to assure planning and execution of the work and such that the schedules provide an appropriate basis for monitoring and evaluating the progress of the work. A work activity is defined as an activity that requires time and resources (labor, equipment, and material) to complete. Activities that require unusual shift work, such as, 2 shifts, 6-day week, or so forth, shall be clearly identified in the schedule. The schedules shall indicate the sequence and interdependency of work activities. They shall include, but not be limited to, the following items:

SECTION 01321  
PROGRESS SCHEDULES

1. Mobilization and move-in
  2. Temporary construction support installations
  3. Coordination with other contractors, State Parks, utilities and work by others adjacent to the work
  4. Excavation, dredging, and related earthwork activities
  5. Submittal preparation by the Contractor and review by the Owner's Representative, including Shop Drawings, and all other submittals
  6. Other major construction activities
  7. Subcontractor's items of work
  8. Approvals and notices required by regulatory agencies or other third party
  9. Supervisory Owner activities
  10. Punch-out and acceptance of work
  11. Contract stipulated milestone dates and sequence of work constraints, substantial completion date, and final completion date
  12. Final clean up
- D. Use a computerized critical path scheduling system capable of producing computer generated reports with the following minimum information:
1. Activity identification code keyed to Summary Schedule activities
  2. Activity number and activity description
  3. From the date of the report, remaining working days left until early finish of each activity
  4. Activity percent complete
  5. Activity duration
  6. Early start/finish and late start/finish
  7. Actual start date/finish date
  8. Total float
  9. Free float
  10. The predecessor and successor activities for each individual activity including the precedence logic relationships
  11. A comparison between the current update and the baseline schedule
- E. Activities of the Owner and the Owner's consultants shall not be placed on the critical path, if avoidable.

1.7 MONTHLY SCHEDULE UPDATES

- A. On a monthly basis, the Contractor shall meet with the Owner's Representative for the purpose of updating the Schedule, date to be determined by the Owner's Representative and at least 7 calendar days prior to the submittal of the updated schedule.
- B. Submit updated or revised schedules in the same detail as the original submittal, unless otherwise directed by the Owner's Representative. Submit updates at the beginning of each month for the duration of the Contract. The Contractor's Project Manager and Construction Scheduler and representatives of all major subcontractors shall review the detailed Project schedule and computer tabulations jointly.
- C. The monthly submittal to the Owner's Representative shall be accompanied by a Schedule Narrative Report. The Schedule Narrative Report shall describe the physical progress during the report period, plans for continuing the work during the forthcoming report period, actions planned to correct any negative float and an explanation of potential delays and/or problems and their estimated impact on performance and the overall project completion date.

1.8 VARIANCE REPORT

Submit a Variance Report monthly. It shall compare the Baseline and Updated Detailed Project Schedule and shall report non-critical activities that have been delayed 20 or more working days and critical (15 days or less total float) activities that have incurred any delay. This report shall include:

- 1. Activity code and description
- 2. Baseline scheduled early start/finish dates
- 3. Current anticipated early start/finish dates
- 4. Working days remaining to complete the activity
- 5. Percent complete of the activity
- 6. Reason for the delay in the "Remarks" column

1.9 WEEKLY SCHEDULE

Once each week, on a day mutually agreed to by the Owner's Representative and the Contractor, a meeting will be held to assess the progress achieved by the Contractor during previous workweek. Contractor shall submit a progress schedule listing the activities completed and in progress for the previous week and the activities scheduled for the succeeding 2 weeks. A bar chart derived from the detailed schedule shall be used to generate the three-week window. All activities shown in this short interval schedule will be identified by the same activity numbers and descriptions as shown on the Detailed Construction Schedule. Contractor may add details to monitor this short interval Schedule.

1.10 EQUIPMENT SCHEDULE

- A. Submit within 45 calendar days of Notice to Proceed, a schedule showing dates when key construction equipment shall be brought on the project to accomplish the work. This schedule shall list the quantity of equipment by type and capacity (excluding small tools) in a bar chart form.
- B. Update equipment schedule monthly showing actual equipment onsite at time of reporting period and forecasted equipment requirements necessary to achieve the baseline schedule.

1.11 AS-BUILT SCHEDULE

Submit within 30 calendar days after the final completion, an as-built schedule that shows actual finish dates for all activities. Adjust logic ties to reflect actual manner in which the work was executed. Submittal of the as-built schedule is a condition precedent to release of retainage and final payment.

1.12 REVISIONS TO DETAILED PROJECT SCHEDULE

- A. Contractor may request a revision to the current Detailed Project Schedule. Requests for schedule revision shall be submitted in writing to the Owner's Representative with justification and supporting evidence, as the Owner's Representative deems necessary to determine whether the Contractor is entitled to such revision under the provisions of the Contract. Adjustments in schedules cannot exceed the contract time plus approved time extensions to the construction milestone and completion requirements.
- B. Requests for revisions to the schedule shall be made separately from the monthly updates and in the same format and detail as the original detailed baseline project schedule submittal. Minor changes to the accepted Schedule may be accepted at monthly meetings; a minor change is not considered a revision in the context of this Section. However, any revision shall incorporate previously made changes, both major and minor, to reflect current as-built and as-planned conditions.
- C. No change to the approved Detailed Project Schedule shall be made without the prior written approval of the Owner's Representative. Revisions to the Detailed Project Schedule shall be submitted for acceptance when required by the Owner's Representative or on the occurrence of one or more of the following events:
  - 1. The Owner's Representative directs a change that affects an interim or final milestone date(s) specified under the Contract Documents or alter the length of a critical path.

SECTION 01321  
PROGRESS SCHEDULES

2. A Change Order or Authority for Adjustment affects Contract interim or final milestone date(s) or the sequence of work.
3. Contractor elects to change any logic sequence or duration of activities or insert or delete activities.

1.13 SCHEDULE TIME EXTENSIONS

Float or slack time is not for the exclusive benefit or use of either the Contractor or the Owner, but it is a resource available to both parties, as needed to meet Contract milestones and Contract completion dates. It is further acknowledged that float created during the project through the actions of either party likewise remains for the benefit of both parties unless expressly agreed in advance to be for the sole benefit of one party.

PART 2 – PRODUCTS

Not Applicable

PART 3 – EXECUTION

Not Applicable

PART 4 – MEASUREMENT & PAYMENTS

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including, but not limited to, the following:
- B. Procedural Submittals
  - a. Contractor's Construction Schedule
  - b. Reports
    - 1) Daily Construction Reports
    - 2) Material Location Reports
    - 3) Field Correction Reports
  - c. Submittal Schedule
  - d. Shop Drawings
  - e. Quality Assurance Submittals
- C. Administrative Submittals

Refer to other Division – 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:

  - a. Permits
  - b. Applications for payment
  - c. Performance and payment bond
  - d. Insurance certificates
  - e. List of Subcontractors
- D. Related Sections

The following Sections contain requirements that relate to this Section:

  - a. Division 1 Section 01321, "Progress Schedules" specifies requirements for submittal and distribution of various schedules and reports as specified.
  - b. Division 1 Section 01770, "Closeout Procedures" specifies requirements for submittal of Project Record Documents, Operation and Maintenance Manuals, and Warranties at project closeout.

1.2 DEFINITIONS

A. Submittals

During the process of construction, the Contractor sends many different items to the Owner's Representative to satisfy provisions in the Contract Documents. Because the number of dissimilar items involved is large, the Contract documents use the collective term "submittals" when referring to these items collectively. This single, comprehensive term incorporates any item the Contractor forwards to the Owner's Representative for review or further processing.

Submittals serve many different purposes, but their main function is to distribute information among the various parties involved in the Project and are an expression of the

Contractor's interpretation of requirements in the Contract Documents, show how the Contractor intends to fulfill these requirements, and also allow the Owner's Representative an opportunity to correct any misunderstandings the Contractor might have regarding the intent of the Contract Documents.

B. Shop drawings

As used in this Section, drawings, schedules, diagrams, and other data prepared specifically for this contract, by contractor or through contractor by way of subcontractor, manufacturer, supplier, distributor, or other lower tier contractor, to illustrate portion of work.

C. Administrative submittals

Data presented for reviews and approval to ensure that administrative requirements of project are adequately met but not to ensure directly that work is in accordance with design concept and in compliance with contract documents.

1.3 SUBMITTAL PROCEDURES

A. Coordination

1. Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal in accordance with the dates established in the Submittal Schedule.
2. Begin submittal process only after receipt of accepted submittal schedule.
3. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.

B. Processing

Submittals shall be submitted to the Owner's Representative at the address to be provided prior to mobilization.

1. To avoid the need to delay installation as a result of the time required to review and process submittals, allow time as noted below for submittal review, including time for re-submittals.
  - a. Allow Owner's Representative 10 working days, excluding legal holidays, Saturdays or Sundays, for initial review process. Allow additional time if Owner's Representative must withhold review to permit coordination with subsequent submittals.
  - b. Allow Owner's Representative 10 working days, excluding legal holidays, Saturdays or Sundays, for each re-submittal review process.

SECTION 01330  
SUBMITTAL PROCEDURES

- c. Time for review process starts when Owner's Representative receives submittal and is exclusive of time required for shipping to and from the Owner's Representative's office.
  - 1) Submittals received by 10:00 am will be considered as received on that day.
  - 2) Submittals received after 10:00 am will be considered received on the next working day.
- 3. No extension of Contract Time will be authorized because of failure to transmit submittals to the Owner's Representative in accordance with the dates established in the Submittal Schedule.
- 4. Submittals not requested will not be reviewed or retained by the Owner's Representative.
- 5. Upon receipt of submittals, Owner's Representative will assign a Submittal Log Number thereto. Contractor, in any subsequent correspondence, shall refer to this Submittal Log Number to expedite replies relative to previous submittals.
- 6. Unless Contractor makes other arrangements, submittals will be returned by standard USPS or UPS ground delivery.

C. Submittal Preparation

- 1. Place a permanent label or title block on each submittal for identification. Size of label is optional, but all Information required shall be included and be easily readable.
  - a. Include the following information on the label for processing and recording action taken:
    - 1) Project name
    - 2) Project number (as provided by Owner's Representative)
    - 3) Date
    - 4) Name and address of Owner's Representative: do not include logo
    - 5) Name and address of Contractor
    - 6) Name and address of subcontractor, supplier, manufacturer as applicable.
    - 7) Name of drawing preparer: not initials
    - 8) Number and title of appropriate Specification Section
    - 9) Drawing number and detail references, as appropriate
    - 10) Name of person and company preparing submittal
- 2. Provide a space approximately 3-1/2' x 11" on the label or space on Shop Drawings, Product Data, and Samples to record the Contractor's review and

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SUBMITTAL PROCEDURES

approval markings and the action taken, and the Owner's Representative's action stamp.

3. Shop Drawings, Product Data, and Samples not bearing the Contractor's review and approval stamps, with action taken, and signature, will not be accepted for review.
4. Shop Drawings, Product Data, and Samples submitted without specified space for review, approval, information label, and action stamps, will not be accepted for review.

D. Submittal Transmittal

1. General
  - a. Transmit each submittal from Contractor to Owner's Representative using a transmittal form.
  - b. The Owner's Representative will not accept submittals received from sources other than the Contractor and will be returned without action.
2. Recording Information
  - a. On the transmittal, record relevant information and requests for data.
  - b. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations.
  - c. Include Contractor's certification that information complies with Contract Document requirements.

1.4 CONTRACTOR'S SUBMITTAL REGISTER

Prepare and maintain submittal register, as the work progresses.

- A. Submittal Register

Contractor shall prepare and submit the submittal register using a form approved by the Owner's Representative. Submit with quality control plan and project schedule. Verify that all submittals required for project are listed and add missing submittals.
- B. Copies Delivered to the Owner

Deliver one copy of submitted register updated by contractor to the Owner with each invoice request.

1.5 SUBMITTAL SCHEDULE

- A. Coordinate Submittal Schedule with the list of subcontracts, Schedule of Values and the list of products as well as the Contractor's Construction Schedule.
- B. In addition to the Information to be provided on the Submittal Schedule, provide on Contractor's letterhead a list of all subcontractors and a description of the work to be performed by the subcontractor.

C. Distribution

1. Following response to initial submittal, print and distribute copies to the Owner's Representative, subcontractors, and other parties required to comply with submittal dates indicated. Post copies in the Project meeting room and field office.
2. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.

1.6 REPORTS

A. Daily Construction Reports

1. Prepare a daily construction report, recording the following information concerning events at the site, and submit duplicate copies to the Owner's Representative and Owner for record at weekly intervals:
  - a. List of subcontractors at the site
  - b. Approximate count of personnel at the site
  - c. High and low temperatures, general weather conditions
  - d. Accidents and unusual events
  - e. Meetings and significant decisions
  - f. Stoppages, delays, shortages, losses
  - g. Meter readings and similar recordings
  - h. Emergency procedures
  - i. Orders and requests of governing authorities
  - j. Change Orders received, implemented
  - k. Owners connected, disconnected
  - l. Equipment or system tests and start-ups
  - m. Partial Completions,
  - n. Substantial Completions authorized
  - o. Volumes estimations

B. Field Correction Reports

When the need to make corrective action that requires a departure from the Contract Documents arises, prepare a detailed report including a statement describing the problem and the corrective changes. Indicate reasons the Contract Documents cannot be followed. Submit a copy to the Owner's Representative Immediately.

1.7 SHOP DRAWINGS

1. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents.
  - a. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings.
  - b. Standard information prepared without specific reference to the Project is not a Shop Drawing.
2. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates and similar Drawings. Shop Drawings shall be numbered consecutively. Include the following information:

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- a. Clearly marked with the Owner's Representative's Project number, Owner's Project number, if any, and Contract type
  - b. Engineer's Drawing number, if any, on which the item is indicated, and the Specification section number
  - c. Name of the Contractor
  - d. System in which the item is a component
  - e. Highlight, encircle, or otherwise indicate deviations from the Contract Documents
  - f. Dimensions
  - g. Identification of products and materials included by sheet and detail number and Specification Number
  - h. Notation of dimensions established by field measurement
  - i. Details of Construction
3. Do not submit Shop Drawings for construction that do not comply with requirements of the Contract Documents.
  4. Contractor shall maintain complete set of Shop Drawings as "Record Shop Drawings", to turn over to the Owner at Project closeout.
    - a. Refer to Section 01770 "Closeout Procedures", for additional requirements.

PART 2 - PRODUCTS

Not Applicable

PART 3 - EXECUTION

Not Applicable

PART 4 – MEASUREMENT & PAYMENTS

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION

SECTION 01330  
SUBMITTAL PROCEDURES

SUBMITTAL PROCEDURES APPENDIX 01330-A

ACTION STAMP SAMPLE

INTERNATIONAL USE ONLY	<b>Batiquitos Lagoon Maintenance Dredging Project Carlsbad, CA</b>			
	<b>Submittal</b>			
	<small>Review of shop drawings, product data and/or samples is for conformance with the design concept and with the information given in the Contract Documents. This review does not relieve the Contractor of responsibility for any deviation from the Contract Documents. Refer to the Contract Documents relative to submittals for clarification of Contractor responsibility.</small>			
	DISCIPLINE	REVIEWER	DATE	Remarks
	Architectural / Design			
	Structural			
	Civil / Site			
	Mechanical			
Electrical				
Interiors				
<b>SELECTION</b>				
<b>Final Action for Contractor:</b>				
<b>By</b>		<b>Date</b>		
<input type="checkbox"/>	<b>Approved (APP)</b> Work May Proceed	<input type="checkbox"/>	<b>Not Approved (NA)</b> Work Shall Not Proceed Based on Information Submitted. Resubmit.	
<input type="checkbox"/>	<b>Approved as Noted (ANN)</b> Proceed on Basis of Revised Information Noted	<input type="checkbox"/>	<b>Submittal Not Requested (SNR)</b>	

SECTION 01330  
SUBMITTAL PROCEDURES

SUBMITTAL PROCEDURES APPENDIX 01330-B  
CONTRACTOR'S SUBMITTAL LABEL INFORMATION SAMPLE

Project	Batiquitos Lagoon Maintenance Dredging Project 2011-2012
CSLC Contract No.	
Owner's Representative Project No.	M&A #11-002-01
Date	
Owner's Representative	Merkel & Associates 5434 Ruffin Road San Diego, CA 92123
Project Engineer	TerraCosta Consulting Group 3890 Murphy Canyon Road, Suite 200 San Diego, CA 92123
General Contractor Address, phone number	
Subcontractor Address, phone number	
Supplier/Manufacturer Address Phone No.	
Drawn By (name, not initials)	
Specification No. and Title	
Drawing No.	
Detail Reference (if applicable)	
Name of person and company preparing submittal	

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SUBMITTAL PROCEDURES

SUBMITTAL PROCEDURES APPENDIX 01330-C  
CONTRACTOR'S SUBMITTAL LABEL INFORMATION SAMPLE

**SUBMITTAL  
TRANSMITTAL**

Contractor's Logo  
and address here)

Project: Batiquitos Lagoon Maintenance Dredging Project

CSLC Contract No: \_\_\_\_\_  
Engineer's Project No: \_\_\_\_\_  
Contractor's Project No: \_\_\_\_\_  
Date Sent to Eng.: \_\_\_\_\_  
Date Returned to Contr.: \_\_\_\_\_

To:

Returned Via:  
\_\_\_\_ UPS Standard Ground  
\_\_\_\_ UPS/FedEx Overnight (Purchase order required)  
\_\_\_\_ Your Messenger

Attn:

Submittal Description:

Specification Section No.:	Items Submitted: Shop Drawings, Product Data, Samples, Maint. Manuals, Etc.	Fabricator/Supplier:	Review Code*:	Eng. Submittal Log. No.:
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Deviations, Minor Variations and Limitations: \_\_\_\_\_

The Contractor certifies that it has examined the items submitted by this transmittal and finds that they are, to the best of its knowledge, in compliance with the Contract Documents.

By: \_\_\_\_\_ Name: \_\_\_\_\_  
(Signature required)

Remarks:

The information submitted has been reviewed for compliance with the Contract Documents. The review and the resulting notations so not assume completeness of the submittal nor suggest that information not requested is waived. Further, the review does not relieve the Contractor from the satisfactory completion of the Work in compliance with the Contract Documents.

By: \_\_\_\_\_ Name: \_\_\_\_\_  
(Signature required)

\* Review Codes:

APP	Approved:	Work May Proceed
AAN	Approved As Noted:	Proceed on Basis of Revised Information Noted
NA	Not Approved:	Work Shall Not Proceed Based on Information Submitted. Resubmit.
SNR	Submittal Not Requested:	Not Reviewed or Retained by the COTR.

Primary Checker: \_\_\_\_\_ Secondary Checkers: \_\_\_\_\_

PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists of furnishing transportation, labor, materials, equipment and incidentals required to place, construct, maintain and remove temporary facilities.

1.2 SUBMITTALS

Owner approval is required for all submittals. The following Preconstruction Submittals shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

- A. Mobilization/demobilization traffic control plan
- B. Construction site plan

1.4 CONSTRUCTION SITE PLAN

Prior to the start of work, submit a site plan showing the locations of temporary facilities (including layouts and details, equipment and material storage area (onsite and offsite), and access and haul routes used for this contract. Show locations of safety and construction fences, site trailers, construction entrances, trash dumpsters, temporary sanitary facilities, and worker parking areas.

1.5 TEMPORARY UTILITIES

- A. The Contractor shall provide all necessary utilities for any temporary on-site office.
- B. There are no immediately available electrical, water, sewer, telephone, or gas services available at the designated work areas.

1.6 WEATHER PROTECTION

- A. Take necessary precautions to ensure that temporary covers over stored materials are monitored carefully. Take immediate actions required to seal and secure covers when rain or other detrimental weather is imminent, and at the end of each workday.
- B. Site Storm Protection: When a warning of gale force winds is issued, take precautions to minimize danger to persons, and protect the work and nearby property. Precautions shall include, but are not limited to, removing loose materials, tools and equipment from exposed locations; and removing or securing temporary work. When a warning of heavy rains is issued, take precautions to minimize damages due to floods or high standing water.

1.7 STORAGE AREAS

Storage Size and Location: The open site available for storage shall be confined to the indicated operations areas as indicated on the drawings and/or described in the permits.

1.8 TEMPORARY SANITARY FACILITIES

Provide adequate sanitary conveniences of a type approved for the use of persons employed on the work, properly secluded from public observation, and maintained in such a manner as required and approved by the Owner's Representative. Temporary sanitary facilities shall be furnished, maintained and removed after acceptance of the work by a commercial firm licensed to do this work by the government entity having jurisdiction over the area where the project is located. Maintain these conveniences at all times without nuisance. Upon completion of the work, remove the conveniences from the premises, leaving the premises clean and free from nuisance. Include provisions for pest control and elimination of odors. Facilities shall be adequately positioned and anchored against being toppled by high coastal winds.

All trash receptacles shall be of a covered design and shall be kept closed to prevent wind blow out and animal access. Trash receptacles shall be emptied at least weekly.

1.9 TEMPORARY BUILDINGS

- A. Temporary facilities (including trailers) shall be in like new condition. Location shall be subject to direction by the Owner's Representative. Storage of material/debris under such facilities is prohibited. Contractor shall be responsible for the security of the stored property.
- B. Trailers or storage buildings will be permitted, where space is available, subject to the approval of the Owner's Representative. The trailers or buildings shall be in good condition, free from visible damage rust and deterioration, and meet all applicable safety requirements. Trailers shall be roadworthy and comply with all appropriate state and local vehicle requirements. Failure to maintain storage trailers or buildings to these standards shall result in the removal of non-complying units at the Contractor's expense. A sign not smaller than 24 by 24 inches shall be conspicuously placed on the trailer depicting the company name. Trailers shall be anchored to resist high winds and must meet applicable State and local standards for anchoring mobile buildings and trailers.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

3.1 TEMPORARY PHYSICAL CONTROLS

- A. Access Controls - Place warning signs at the construction area perimeter designating the presence of construction hazards requiring unauthorized persons to keep out. Signs must be placed at the dredge discharge area warning the public of construction activities. Gates must be locked during hours of non-operation and when frequent entry/exit is not needed.
- B. Temporary fencing - Temporary fencing must be placed around the dredge discharge point and around the beach equipment storage area.

3.2 TEMPORARY WIRING

If used, provide temporary wiring in accordance with National Fire Protection Association (NFPA) 241 and NFPA 70, Article 305-6(b), Assured Equipment Grounding Conductor Program. Program shall include frequent inspection of all equipment and apparatus.

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION

PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists, in general, of conforming to the requirements specified.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z359.1	Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components
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ASME INTERNATIONAL (ASME)

ASME B30.5	Mobile and Locomotive Cranes
ASME B30.8	Floating Cranes and Floating Derricks
ASME B30.22	Articulating Boom Cranes

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR 1910	Safety and Health Regulation in General Industry
29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
29 CFR 1926	Safety and Health Regulations for Construction
29 CFR 1926.65	Hazardous Waste Operations and Emergency Response
29 CFR 1926.500	Fall Protection

U. S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	Safety and Health Requirements Manual
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NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10	Portable Fire Extinguishers
NFPA 70	National Electrical Code
NFPA 241	Safeguarding Construction, Alteration, and Demolition Operations

1.3 SUBMITTALS

Owner approval is required for all submittals. The following Preconstruction Submittals shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

- A. Accident Prevention Plan (APP)
- B. Activity Hazard Analysis (AHA)
- C. Certificate of Compliance (Crane)

1.4 DEFINITIONS -Terms are defined as follows:

- A. High Visibility Accident. Any mishap that may generate publicity and/or high visibility.
- B. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even though provided by a physician or registered personnel.
- C. Multi-Employer Work Site (MEWS). A multi-employer work site, as defined by OSHA, is one in which many employers occupy the same site. The Owner considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors.
- D. Operating Envelope. The area surrounding any crane. Inside this "envelope" is the crane, the operator, riggers, rigging gear between the hook and the load, the load and the crane's supporting structure ground, rail, or similar items.
- E. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:
  - 1. Death, regardless of the time between the injury and death, or the length of the illness;
  - 2. Days away from work;
  - 3. Restricted work;
  - 4. Transfer to another job;
  - 5. Medical treatment beyond first aid;
  - 6. Loss of consciousness; or
  - 7. A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in actions listed above.
- F. Site Safety and Health Officer (SSHO). The superintendent or other qualified or competent person who is responsible for the on-site safety and health required for the project. The Contractor quality control (QC) person can be the SSHO on this project.
- G. Weight Handling Equipment (WHE) Accident. A WHE accident occurs when any one or more of the six elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; 1) material

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or equipment damage; 2) dropped load; 3) derailment; 4) two-blocking; 5) overload; and 6) collision, including unplanned contact between the load, crane, and/or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents, even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.)

1.5 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, work performed shall comply with CALOSHA Construction Safety Orders, USACE EM 385-1-1, and other related federal, state, and local, laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply.

1.6 DRUG PREVENTION PROGRAM

Conduct a proactive drug and alcohol use prevention program for all workers, prime and subcontractor, on the site. Ensure that no employee uses illegal drugs or consumes alcohol during work hours. Ensure there are no employees under the influence of drugs or alcohol during work hours. After accidents, collect blood, urine, or saliva specimens and test the injured and involved employees for the influence of drugs and alcohol. A copy of the test shall be made available to the Owner upon request.

1.7 TRAINING

New employees (prime and sub contractor) shall be informed of specific site hazards, attend and pass a site safety review before they begin work as called for in Section 01140 Work Restrictions.

1.8 DISPLAY OF SAFETY INFORMATION

Within 2 calendar days after commencement of work, erect a safety bulletin board at the job site. The following information shall be displayed on the safety bulletin board in clear view of the on-site construction personnel, maintained current, and protected against the elements and unauthorized removal:

- A. Map denoting the route to the nearest emergency care facility.
- B. Emergency phone numbers.

- C. Copy of the most up-to-date APP.
- D. OSHA 300A Form.
- E. A sign indicating the number of hours worked since last lost workday accident.
- F. OSHA Safety and Health Protection-On-The-Job Poster
- G. Safety and Health Warning Posters.

#### 1.9 EMERGENCY MEDICAL TREATMENT

Contractors shall arrange for their own emergency medical treatment. The Owner has no responsibility to provide emergency medical treatment.

#### 1.10 REPORTS

- A. Accident Reports
  - 1. For recordable injuries and illnesses, and property damage accidents resulting in at least \$2,000 in damages, the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the CALOSHA Incident Report and provide the report to the Owner's Representative within 1 calendar day of the accident. The Owner's Representative will provide copies of any required or special forms.
  - 2. For a weight handling equipment accident the Prime Contractor shall conduct an accident investigation to establish the root cause of the accident, complete the required CALOSHA Accident Report form and provide the report to the Owner's Representative within 30 calendar days of the accident. The Owner's Representative will provide a blank copy of the accident report form.
- B. Accident Notification

Notify the Owner's Representative as soon as practical, but not later than four hours, after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than \$2,000, or any weight handling equipment accident involving an overturned crane, collapsed boom, or any other major damage to the crane or adjacent property. Information shall include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident, including the type of construction equipment used. Preserve the conditions and evidence on the accident site.

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- C. Regulatory Citations and Violations  
Contact the Owner's Representative immediately of any OSHA or other regulatory agency inspection or visit, and provide the Owner's Representative with a copy of each citation, report, and Contractor response. Correct violations and citations promptly and provide written corrective actions to the Owner's Representative.
- D. Certificate of Compliance  
The Contractor shall provide a Certificate of Compliance for each crane entering an activity under this contract (see Contracting Officer for a blank certificate). Certificate shall state that the crane and rigging gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance shall comply with 29 CFR 1926 and USACE EM 385-1-1 section 16 and Appendix H. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.1 CONSTRUCTION AND/OR OTHER WORK

The Contractor shall comply with USACE EM 385-1-1, NFPA 241, the APP, the AHA, CALOSHA and other related submittals and activity fire and safety regulations.

3.2 EQUIPMENT

- A. Material Handling Equipment
1. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.
  2. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.
  3. Operators of forklifts or power industrial trucks shall be licensed in accordance with CALOSHA.
- B. Equipment and Mechanized Equipment
1. Equipment shall be operated by designated qualified operators. Proof of qualifications shall be kept on the project site for review.

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2. Manufacture specifications or owner's manual for the equipment shall be on site and reviewed for additional safety precautions or requirements that are sometimes not identified by OSHA or USACE EM 385-1-1. Such additional safety precautions or requirements shall be incorporated into the AHAs.
3. Equipment and mechanized equipment shall be inspected in accordance with manufacturer's recommendations for safe operation by a competent person prior to being placed into use.
4. Daily checks or tests shall be conducted and documented on equipment and mechanized equipment by designated competent persons.

3.3 HOUSEKEEPING

All debris in work areas shall be cleaned up daily or more frequently if necessary. Construction debris may be temporarily located in an approved location; however garbage accumulation must be removed each day. All trash receptacles shall be kept closed and emptied weekly and before any holidays.

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION

PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section consists, in general, of conforming to the requirements specified.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1910.120	Hazardous Waste and Emergency Response
40 CFR 112	Oil Pollution Prevention
40 CFR 122.26	EPA National Pollutant Discharge Elimination System Permit Regulations
40 CFR 241	Guidelines for Disposal of Solid Waste
40 CFR 268	Land Disposal Restrictions
40 CFR 273	Universal Waste Management
40 CFR 279	Used Oil Regulations
40 CFR 355	Emergency Planning and Notification
40 CFR 716	Health and Safety Data Reporting

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 832-R-92-005          Storm Water Management for Construction Activities

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1                  (1996) U.S. Army Corps on Engineers Safety and Health Requirements Manual

WETLAND MANUAL    Corps of Engineers Wetlands Delineation Manual Technical Report Y-87-1

1.3 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all project permit requirements and State, and local laws and regulations. The Contractor shall be

responsible for any delays resulting from failure to comply with environmental requirements.

#### 1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this Section by all subcontractors and suppliers and their employees.

#### 1.5 PAYMENT OF FEES AND FINES

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with permit requirements Federal, State, Regional and local laws and regulations.

#### 1.6 SUBMITTALS

Approval is required for all submittals. The following shall be submitted in accordance with Section 01330, "Submittal Procedures":

- A. Preconstruction Submittals
  - Environmental protection plan
  - Stormwater Pollution Prevention Plan
  - Environmental Quality Board Permits
- B. Closeout Submittals
  - Some of the records listed below are also required as part of other submittals.
  - Preconstruction survey
  - Solid waste disposal permit
  - Waste determination documentation
  - Disposal documentation for hazardous and regulated waste
  - Regulatory notification
  - Contractor Hazardous Material Inventory Log

#### 1.7 REPORTS

- A. Preconstruction Survey
  - Prior to start of any onsite construction activities, the Contractor and the Owner's Representative shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection that are not specifically identified on the drawings as environmental features requiring protection. This survey report shall be signed

by both the Contractor and the Owner's Representative upon mutual agreement between Contractor and Owner's Representative as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference, which their preservation may cause to the Contractor's work under the contract.

- B. Solid Waste Disposal Permit  
Submit one copy of a State and local permit or license showing such agencies' approval of the disposal plan before transporting wastes off-site.
- C. Waste Determination Documentation  
The Contractor will complete a Waste Determination form (provided at the pre-construction conference) for all Contractor derived wastes to be generated. The waste determination must be based upon either a constituent listing from the manufacturer used in conjunction with consideration of the process by which the waste was generated; EPA approved analytical data, or laboratory analysis (Material Safety Data Sheets (MSDS) by themselves are not adequate). All support documentation must be attached to the Waste Determination form. As a minimum, a Waste Determination form must be provided for the following wastes (this listing is not all inclusive): oil and latex based painting and caulking products, solvents, adhesives, aerosols, petroleum products, and all containers of the original materials.
- D. Disposal Documentation for Hazardous and Regulated Waste  
Submit a copy of the applicable EPA and State permit(s), manifest(s), or license(s) for transportation, treatment, storage, and disposal of hazardous and regulated waste by permitted facilities.
- E. Regulatory Notification  
The Contractor is responsible for all regulatory notification requirements in accordance with Federal, State and local regulations. The Contractor will forward copies to the Owner's Representative prior to commencement of work activities. Typically, regulatory notifications must be provided for the following (this listing is not all inclusive): demolition, renovation, NPDES defined site work, remediation of controlled substances (asbestos, hazardous waste, lead paint).

## 1.8 ENVIRONMENTAL PROTECTION REQUIREMENTS

- A. General  
Provide and maintain, during the life of the contract, environmental protection as defined. Plan for and provide environmental protective measures to control pollution that develops during normal construction practice. Plan for and provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project. Comply with Federal, State, and local regulations

pertaining to the environment, including water, air, solid waste, hazardous waste and substances, oily substances, and noise pollution.

Attend an environmental briefing to be included in the preconstruction meeting. Provide the following information: types, quantities, and use of hazardous materials that will be brought onto the activity; types and quantities of wastes/wastewater that may be generated during the contract.

- B. Licenses and Permits  
The Contractor shall obtain licenses and permits except for those appearing as attachments:
- C. Contractor Liabilities for Environmental Protection  
The Contractor is advised that this project is subject to Federal, State, and local regulatory agency inspections to review compliance with environmental laws and regulations. The Contractor will fully cooperate with any representative from any Federal, State or local regulatory agency who may visit the job site and will provide immediate notification to the Owner's Representative, who will accompany them on any subsequent site inspections. The Contractor will complete, maintain, and make available to the Owner's Representative, or regulatory agency personnel all documentation relating to environmental compliance under applicable Federal, State and local laws and regulations. The Contractor will immediately notify the Owner's Representative if a Notice of Violation (NOV) is issued to the Contractor.

The Contractor will be responsible for all damages to persons or property resulting from Contractor fault or negligence as well as for the payment of any civil fines or penalties which may be assessed by any Federal, State or local regulatory agency as a result of the Contractor's or any subcontractor's violation of any applicable Federal, State or local environmental law or regulation. Should a Notice of Violation (NOV), Notice of Noncompliance (NON), Notice of Deficiency (NOD), or similar regulatory agency notice be issued to the Owner on account of the actions or inactions of the Contractor or one of its subcontractors in the performance of work under this contract, the Contractor will fully cooperate with the Owner in defending against regulatory assessment of any civil fines or penalties arising out of such actions or inactions.

#### 1.9 ENVIRONMENTAL PROTECTION PLAN

- A. General  
Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Owner's Representative. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern

shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction tasks. Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Owner's Representative for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

B. Compliance

No requirement in this Section shall be construed as relieving the Contractor from compliance with all permit requirements and all applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

C. Contents

1. The environmental protection plan shall include, but shall not be limited to the following:
  - a. Names of persons within the Contractor's organization who is (are) responsible for ensuring adherence to the Environmental Protection Plan.
  - b. Names and qualifications of persons responsible for manifesting hazardous waste to be removed from the site, if applicable.
  - c. Names and qualifications of persons responsible for training the Contractor's environmental protection personnel.
  - d. Description of the Contractor's environmental protection personnel training program.
  - e. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.
  - f. The Spill Control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. This plan shall include as a minimum:

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- 1.) The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Owner's Representative, the CDFG Ecological Reserve Manager, and the local Fire Department in addition to the legally required Federal, State, and local reporting channels (including the National Response Center, 1-800-424-8802) if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers.
  - 2.) The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.
  - 3.) Training requirements for Contractor's personnel and methods of accomplishing the training.
  - 4.) A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
  - 5.) The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.
  - 6.) The methods and procedures to be used for expeditious contaminant cleanup.
- g. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. A copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time shall be included in the contaminant prevention plan. As new hazardous materials are brought on site or removed from the site, the plan shall be updated.
- h. A biological resources protection plan that defines procedures for identifying and protecting biological resources known to be on the project site; and/or identifies procedures to be followed if biological resources not previously known to be onsite or in the area are discovered during construction. The plan shall include methods to assure the protection of known or discovered resources and shall identify lines of communication between Contractor personnel and the Owner's Representative.

1.10 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings, plans and specifications which may have an environmental impact will be subject to approval by the Owner's Representative and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Owner's Representative determines that the proposed alternate method will have an adverse environmental impact or other impact on the Owner's interests.

1.11 NOTIFICATION

The Owner's Representative will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Owner's Representative of the proposed corrective action and take such action when approved by the Owner's Representative. The Owner's Representative may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Owner's Representative may take under the contract.

PART 2 – PRODUCTS

Not used

PART 3 – EXECUTION

3.1 PROTECTION OF NATURAL RESOURCES

Preserve the natural resources within the project boundaries and outside the limits of permanent work. Confine construction activities to within the limits of the work indicated or specified and take no access of areas identified as environmentally sensitive, for any reason, unless explicitly directed to do so by Owner's Representative.

3.2 LAND RESOURCES

A. General

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs,

vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any existing landscape feature unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times. Stone, soil, or other materials displaced shall be removed by the Contractor unless directed in their reuse by Plans.

B. Work Area Limits

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

C. Erosion and Sediment Controls

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with permit requirements and Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The Contractor's best management practices shall be in accordance with the National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention Plan (SWPPP). All temporary measures shall be removed after the area has been stabilized.

D. Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Owner's Representative. Temporary movement or relocation of Contractor facilities shall be made only when approved.

3.3 WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation unless otherwise indicated. The Contractor shall monitor all water areas affected by construction activities. For construction activities immediately adjacent to impaired surface waters, the Contractor shall be capable of quantifying sediment or pollutant loading to that surface water when required by State or federally issued Clean Water Act permits. Contractor shall use vegetable based lubricants and fluids for all equipment operating in the water. Hydraulic fluids used on the dredge shall all be vegetable based. Any spill of

vegetable based products shall be reported as a spill in accordance with state and federal regulations.

### 3.4 AIR RESOURCES

- A. General  
Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards.
- B. Particulates  
Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, such as from recycled materials processing equipment; shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be exceeded or which would cause a hazard or a nuisance. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs. The Contractor shall comply with all State and local visibility regulations.
- C. Odors  
Odors from construction activities shall be controlled at all times. The odors shall not cause a health hazard and shall be in compliance with State regulations and/or local ordinances.
- D. Sound Intrusions  
The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise. The Contractor shall comply with the provisions of the State of California and local rules.
- E. Burning  
Burning is prohibited.

### 3.5 MATERIALS MANAGEMENT AND WASTE DISPOSAL

- A. General  
Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.
- B. Solid Wastes

Solid wastes (excluding clearing debris) shall be placed in closed topped containers that are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor shall transport solid waste off the property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill shall be the minimum acceptable off-site solid waste disposal option. The Contractor shall verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. The Contractor shall comply with Federal, State, and local laws and regulations pertaining to the use of landfill areas.

- C. Contractor Generated Hazardous Wastes/Excess Hazardous Materials  
Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall, at a minimum, manage and store hazardous waste in compliance with 40 CFR 262 and shall manage and store hazardous waste in accordance with the approved hazardous waste management plan. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. The Contractor shall segregate hazardous waste from other materials and wastes, shall protect it from the weather by placing it in a safe covered location, and shall take precautionary measures such as construction of berms or other appropriate measures against accidental spillage. The Contractor shall be responsible for storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations. The Contractor shall transport Contractor generated hazardous waste off the work site property within 5 working days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. The Contractor shall dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Owner's Representative and the Owner. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility. The Contractor shall coordinate the disposition of hazardous waste with the Owner's Representative and the Owner.
- D. Fuel and Lubricants  
To the greatest extent practical, as determined by the Owner's Representative, fueling, lubrication and servicing of vehicles and equipment shall be accomplished off site. When no other option is available and when approved by the Owner's Representative, storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Tarps must be placed underneath all equipment parked overnight on the beach. Contractor shall use vegetable based

lubricants and fluids for all equipment operating over and in the water. Hydraulic fluids used on the dredge shall all be vegetable based. Any spill of vegetable based products shall be reported as a spill in accordance with state and federal regulations.

Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. There shall be no storage of fuel on the project site. Fuel must be brought to the project site as needed in accordance with the work performed. Not more than 150 gallons of fuel and lubricants may be stored on the site at any given time. By environmental permit conditions, fuel storage and refueling activities are subject to a fuel storage plan (see Plan notes).

E. Waste Water

Waste water from construction activities shall not be allowed to enter water ways. The Contractor shall dispose of the construction related waste water off-site in accordance with all Federal, State, Regional and Local laws and regulations.

3.6 CONTROL AND DISPOSAL OF HAZARDOUS WASTES

A. Hazardous Waste/Debris Management

The Contractor will identify all construction activities that will generate hazardous waste/debris. The Contractor must provide a documented waste determination for all resultant waste streams. Hazardous waste/debris will be identified, labeled, handled, stored, and disposed of in accordance with all Federal, State, and local regulations including 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, and 40 CFR 268. Hazardous waste will also be managed in accordance with the approved Hazardous Waste Management Section of the Environmental Protection Plan. Store hazardous wastes in approved containers in accordance with 49 CFR 173 and 49 CFR 178. No hazardous waste will be brought onto the site. Provide to the Owner's Representative a copy of waste determination documentation for any solid waste streams that have any potential to be hazardous waste or contain any chemical constituents listed in 40 CFR 372-SUBPART D. For hazardous wastes spills, verbally notify the Owner's Representative immediately.

B. Hazardous Waste Disposal

The Contractor agrees to provide for the final treatment/disposal of the hazardous material/waste in accordance with all local, State and Federal laws and regulations, and the terms and conditions of the contract within sixty (60) days after the materials have been generated. This will include all necessary personnel, labor, transportation, packaging, detailed analysis (if required for disposal, and/or transportation, including manifesting or completing waste profile sheets, equipment, and the compilation of all documentation is required).

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- C.     Pollution Prevention/Hazardous Waste Minimization  
The Contractor will actively pursue minimizing the use of hazardous materials and the generation of hazardous waste while on site. The Hazardous Waste Management Section of the Environmental Protection Plan will include the Contractor's procedures for pollution prevention/ hazardous waste minimization.
- D.     Hazardous Material Control  
The Contractor will include hazardous material control procedures in the Safety Plan. The procedures will address and ensure the proper handling of hazardous materials, including the appropriate transportation requirements. The Contractor will submit a MSDS and estimated quantities to be used for each hazardous material to the Owner's Representative prior to bringing the material onsite. Typical materials requiring MSDS and quantity reporting include, but are not limited to, oil and latex based painting and caulking products, solvents, adhesives, aerosol, and petroleum products. At the end of the project, the Contractor will provide the Owner's Representative with the maximum quantity of each material that was present at the site at any one time, the dates the material was present, the amount of each material that was used during the project, and how the material was used. The Contractor will also ensure that hazardous materials are utilized in a manner that will minimize the amount of hazardous waste that is generated. The Contractor will ensure that all containers of hazardous materials have NFPA labels or their equivalent. Copies of the MSDS for hazardous materials will be kept on site at all times and provided to the Owner's Representative at the end of the project. The Contractor will certify that all hazardous materials removed from the site are hazardous materials and do not meet the definition of hazardous waste per 40 CFR 261.
- E.     Petroleum Products  
Conduct the fueling and lubricating of equipment and motor vehicles off-site to the maximum extent practical. When maintenance must be done on site it shall be in a manner that protects against spills and evaporation. All used oil generated on site will be managed in accordance with 40 CFR 279. The Contractor will determine if any used oil generated while on-site exhibits a characteristic of hazardous waste. In addition, used oil containing 1000 parts per million of solvents will be considered a hazardous waste and disposed of at Contractor's expense. Used oil mixed with a hazardous waste will also be considered a hazardous waste. All hazardous waste will be managed in accordance with the paragraph entitled Hazardous Waste or Debris Management of this section and will be managed in accordance with the approved Environmental Protection Plan.
- F.     Releases or Spills of Oil and Hazardous Substances  
Contractor shall take precautions to prevent releases/spills of oil and hazardous substances. In the event of any releases of oil and hazardous substances, vegetable lubricants, chemicals, or gases; immediately (within 15 minutes) notify

the CDFG Ecological Reserve Manager, California State Lands Commission, and the Owner's Representative. The Contractor is responsible for verbal and written notifications as required by the federal 40 CFR 355, State and local regulations. Spill response will be in accordance with 40 CFR 300 and applicable State and local regulations. Contain and clean up these spills without cost to the Owner. If Owner assistance is requested or required, the Contractor will reimburse the Owner for such assistance. Provide copies of the written notification and documentation that a verbal notification was made within 20 days.

The Contractor shall notify the Owner's Representative immediately upon discovery of any spill. The contractor shall maintain spill cleanup equipment and materials at the work site. The Contractor shall clean up all hazardous and non-hazardous (WHM) waste spills caused by the Contractor. The Contractor shall reimburse the Owner for all Owner losses occurring during any spill or spill cleanup. The Contractor shall reimburse the Owner for all costs incurred including sample analysis materials, equipment, and labor if the Owner must initiate its own spill cleanup procedures, for Contractor responsible spills, when:

- a. The Contractor has not begun spill cleanup procedure within one (1) hour of spill discovery/occurrence, or
- b. If, in the Owner's Representative's judgment, the Contractor's spill cleanup is not adequately abating life threatening situation and/or is a threat to any body of water or environmentally sensitive areas. For the purposes of this clause, all areas within the State Ecological Reserve are considered to be environmentally sensitive areas.

### 3.7 DUST CONTROL

Keep dust suppressed at all times, including during nonworking periods. Sprinkle or treat, with dust suppressants, the soil at the site, haul roads, and other areas disturbed by operations. Dry power broom cleaning will not be permitted. Air blowing will not be permitted.

### 3.8 NOISE

Make the maximum use of low-noise emission products, as certified by the EPA. Confine operations to the period between 7 a.m. and 7 p.m., Monday through Saturday, exclusive of holidays, unless otherwise authorized by Owner's Representative.

### 3.9 MERCURY MATERIALS

Mercury is prohibited in the construction of this facility, unless specified otherwise, and with the exception of mercury vapor lamps and fluorescent lamps. Dumping of mercury-containing materials and devices such as mercury vapor lamps, fluorescent lamps, and mercury switches, in rubbish containers is prohibited. Remove without breaking, pack to

prevent breakage, and transport off-site in an unbroken condition for disposal as directed. Contractor shall immediately report to the Owner's Representative instances of breakage or mercury spillage. Clean mercury spill area to the satisfaction of the Owner's Representative.

### 3.10 PREVIOUSLY USED EQUIPMENT

The Contractor shall clean all previously used construction equipment prior to bringing it onto the project site. The Contractor shall ensure that the equipment is free from soil residuals, propagule deposits from plant and animal pests, noxious weeds, and plant seeds. The use history of the equipment over the past 12-months shall be disclosed to Owner's Representative. If equipment to be used is coming from an area of known noxious species infestations, Contractor shall be required to clean equipment to Owner's Representative's satisfaction prior to placing equipment in use at site.

### 3.11 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

### 3.12 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; and recognition and protection of biological resources that are known to be in the area.

### 3.13 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction as directed by the Owner's Representative. The Contractor shall, unless otherwise instructed in writing by the Owner's Representative, obliterate all signs of temporary construction facilities such as work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded to the pre-construction condition if requested by the Owner's Representative.

## PART 4 - MEASUREMENT AND PAYMENT

### 4.1 MEASUREMENT

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The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION

PART 1 - GENERAL

1.1. WORK INCLUDED

The work of this section consists, in general, of conforming to the requirements specified.

1.2 SUBMITTALS

The following shall be submitted in accordance with Section 01330, "Submittal Procedures":

- A. Closeout Submittals
- B. As-built drawings

1.3 PROJECT RECORD DOCUMENTS

Project Record Documents consist of furnishing a set of Record Documents showing changes made to the project and representing an "As-Built" set of Drawings. Upon completion and prior to acceptance of the work, Contractor shall submit a set of final Record Documents to the Owner's Representative. Record Documents include, but are not limited to, Drawings and Specifications.

1.4 CLEANUP

Sweep paved areas and rake clean landscaped areas. Remove waste and surplus materials, rubbish and construction facilities from the site. Remove any angular rocks larger than 4-inches or other construction debris on beach. Rock removal is not required for beach cobble.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

Not used

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

The work of this Section is included in other Sections of work and is therefore not measured individually.

4.2 PAYMENT

Full compensation for providing all the labor, materials, tools, equipment and incidentals and for doing all the work involved in this Section will be considered as included in the prices bid for the various related items of work and no separate payment will be made.

END OF SECTION

PART 1 - GENERAL

1.1 WORK INCLUDED

The work of this section includes, in general, providing all labor, materials, tools, equipment and incidentals and doing all work as may be necessary to provide earthwork and dredging; including excavation, dredging, transporting, placement, measuring, filling, and final grading. Note dredge type requirements under Summary of Work (Section 01110).

1.2 SUBMITTALS

Submit Dredging Plan in accordance with Section 01330, "Submittal Procedures." Submit a dredging and measurement work plan for completing this work. Provide detailed description of all equipment and activities proposed in the dredging and beach placement operations, including ingress/egress, safety measures, public safety measures on the beach, measurement of the dredging activities, means of removal, transporting, and placement. Provide a detailed description of proposed surveying methods and timing to account for internal system movement of material within and around the dredging footprint.

1.3 CRITERIA FOR BIDDING

- A. Base bids on the following criteria:
  - 1. Dredged material quantity 118,000 yd<sup>3</sup> with cut elevations within the payable dredge limits as indicated and beach placement within the fill envelope defined.
  - 2. Erosion repair grading and material placement as indicated within the west basin.
  - 3. Repair of storm drain outlet aprons as indicated to reduce stormwater generated erosion and sediment transport in the lagoon.
  - 4. Construction and repair of fencing as indicated in west basin of the lagoon and at nest site E2.
- B. Contractor shall immediately notify Owner's Representative if any dredge material is encountered that is not sands suitable for beach placement, or which is unsuitable for dredging with a cutterhead suction dredge, such that Owner's Representative may divert work or otherwise provide direction to Contractor. Contractor is not required to dredge any material other than beach compatible sands.

1.4 MATERIALS TO BE REMOVED

A materials testing report has been prepared for the project and is available in the Appendices. This material testing report is believed to represent the characteristics of the

dredging area, however, other subsurface conditions may exist. If encountered, these shall be brought to the attention of the Owner's Representative immediately.

#### 1.5 PERMITS

The Contractor shall comply with conditions and requirements of all Federal, State, and local agency permits issued for the project. The Owner's Representative shall provide the required environmental permits for the project. The permits are included as an appendix to this document. Any required air quality permits related to the Contractor's equipment operations shall be obtained by the Contractor. Access permits for work within public street or railroad rights-of-way shall be the responsibility of the Contractor.

#### 1.6 ENVIRONMENTAL PROTECTION REQUIREMENTS

- A. Provide and maintain during the life of the contract, environmental protective measures. Also, provide environmental protective measures required to correct conditions, such as oil spills or debris that occur during the earthwork and dredging operations. All debris to be disposed of off-site within an authorized landfill or other legal receiver site. Comply with Federal, State, and local regulations pertaining to Water, air, and noise pollution.
- B. Contractor shall be responsible for the prompt collection and removal of any trash, debris, quarried rocks, or construction wastes that are deposited on beach that are associated with the construction work or which are derived from the beach nourishment materials.
- C. All equipment operated within the water shall utilize biodegradable vegetable oil-based hydraulic fluids. Exceptions shall be made for small outboard-motored support skiffs.
- D. Tarps must be placed underneath all equipment parked overnight or fueled on the beach.
- E. Contractor shall protect sensitive vegetation, and wildlife during the completion of work. Owner's Representative will identify the locations of the vegetation and animals and the protection limits shall be fenced by Contractor. The "construction fencing" shall be maintained by Contractor during the project. This contract assumes 1,000 feet of temporary protective fencing shall be placed, maintained, and removed upon completion of work by Contractor.

#### 1.7 NOTICE TO PROCEED (NTP)

The Notice to Proceed is expected to be issued in October 2011. It shall be the responsibility of the Contractor to complete the dredging plan schedule, and preconstruction hydrographic survey within 21 calendar days of Notice To Proceed, and to begin dredging within 60 calendar days of Notice To Proceed.

#### PART 2 – PRODUCTS

Not used

PART 3 - EXECUTION

3 DREDGING AND FILL OPERATIONS

- A. General
1. Underground Utilities  
There are no known underground utilities in the dredging footprint. The Contractor shall physically verify the location and elevation of any existing utilities indicated prior to starting construction.
  2. Overhead Utilities and Bridges  
Contractor shall note the presence of overhead utilities and bridges that may limit clearances of high profile dredging equipment.
  3. Machinery and Equipment  
Movement of construction machinery and equipment during construction shall be at the Contractor's risk. Repair, or remove and provide new pipe for existing or newly installed pipe that has been displaced or damaged.
- B. Dredging
1. General  
Dredge to contours, elevation, and dimensions indicated on the Plans. Place excavated materials on the beach south of the inlet at the intended location per the Plans. Dredge the payment zones in the order identified on the Plans.
  2. Tolerances  
A tolerance of 1 foot above the prescribed dredging depth will be allowed in the dredging. There is no paid overdepth dredging allowance.
  3. Side Slopes  
Dredging on side slopes shall follow, as closely as practicable, the cutlines indicated or specified. No pay allowance will be made for excavation dredging beyond the indicated or specified side slopes. Contractor shall be due payment for sand volume removed between cutlines and a 5:1 slope projected upward from this cutline that results from natural slope layback.
  4. Basis for Bids  
The base bid for dredging is based on an estimated quantity of 118,000 yd<sup>3</sup>. No volume adjustments are presently contemplated beyond this volume, however, should the total quantity of dredging be increased by Owner's written authorization from that specified the per cubic yard unit price for dredging shall be paid up to 20% from this basis.
- Payment for dredging will be at the contract unit price per cubic yard, multiplied by total cubic yards of acceptable dredging based on pre- and post-construction surveys of each dredging zone to be performed by an independent California state-licensed surveyor hired by the Contractor and witnessed by the Owner.

The base bid for erosion repair and drainage apron repair work shall be based on completion of work as illustrated in the Plans. Estimated quantities are provided to assist Contractor, however, Contractor shall perform an independent assessment of work effort, volumes, and complexity and shall base its bids on Contractor's own assessment of actions necessary to perform work outlined on Plan sheets.

The earthwork/dredging conditions specified and indicated describe conditions that are known. However, the Contractor is responsible for other conditions encountered which are usual when compared to the conditions recognized in the earthwork/dredging business as usual in earthwork/dredging activities such as those required under this contract. If Contractor encounters conditions it believes are outside of the scope of usual occurrences, it shall immediately bring these to the attention of the Owner's Representative.

5. Inspection  
Inspect the work, keep records of work performed, and ensure that gages, targets, ranges, and other markers are in place and usable for the intended purpose. Furnish, at the request of the Owner's Representative, boats, boatmen, laborers, and materials necessary for inspecting and surveying the work. When required, provide transportation for the Owner's Representative and inspectors to and from the dredging area and between the dredge and adjacent points on shore.
6. Dredge  
Maintain the dredge, barges, pipelines, and associated equipment to meet the requirements of the work. Promptly repair leaks or breaks along pipelines. Remove dredged material placed outside limits due to leaks and breaks at the Contractors expense.
7. Method of Communication  
Provide a system of communication between the dredge crew and the crew at the disposal area. A portable two-way radio is acceptable.
8. Salvaged Material  
Articles of value, which are brought to the surface during dredging operations, shall remain or become the property of the Owner and shall initially be deposited on shore at a convenient location near the site of the work, as directed.
9. Safety of Structures  
The prosecution of work shall ensure the stability of structures lying on or adjacent to the site of the work, insofar as structures may be jeopardized by dredging operations. Repair damage resulting from dredging operations, insofar as such damage may be caused by variation in locations or depth of dredging, or both, from that indicated or permitted under the contract. Anchoring, spudding, or attaching to the bridges, piles or abutments will not be allowed.
10. Dredge Removal

Upon completion of the work, promptly remove dredge, including ranges, buoys, piles, and other markers or obstructions.

C. Beach Fill Placement

1. General

Fill and backfill to contours, elevations, and dimensions indicated. The existing beach contours are variable. The intent of the placement is to extend the existing berm seaward by the distance indicated on the Plans, and along the beach for a distance sufficient to accommodate the dredged volume. The fill will be placed hydraulically and mechanically manipulated to achieve the final grading.

2. Tolerances

A tolerance of 2 feet below the prescribed grade will be allowed in the beach placement. A tolerance of +/- 10 feet shall be allowed for the width of the top of the beach crest.

3. Staking

The contractor shall place and maintain grading stakes with clearly marked target elevations and tolerances on the beach until each section has been accepted by the Owner's Representative.

4. Beach Disposal Site Preparation

Prior to placement of materials on beach, contractor shall remove any debris materials to the extent possible to avoid burying such with sand being placed.

5. Public Access

The contractor shall maintain public access to the beach during operations and shall provide sand and lifeguard vehicle ramps across the discharge pipes at intervals not to exceed 300 feet.

D. Measurement

1. Actions

a. The Contractor will retain and independent California licensed hydrographic surveyor to provide all pre-, post- and acceptance surveys. Progress surveys will be made by the Contractor to support payment requests for dredged material. The Owner's Representative reserves the right to witness and perform separate verification of all surveys and Contractor shall give at least 5 days notice of survey activities.

b. Surveys/Soundings

(1) A mandatory pre-survey conference shall be held to discuss all aspects of the Contractor's survey plan including: control, equipment, procedures, safety plan, QC program,

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- excavation control, dredging control, calibration, schedule, excavation/dredging limits, and deliverables.
- (2) The material removed will be measured by cubic yard in place, by means of soundings taken before and after excavation/dredging. Surveys/soundings will be taken by either, trigonometric leveling (total station)/differential leveling, Differential Global Positioning System (DGPS), 200 kHz single-beam acoustic methods, acoustic multi-beam swath methods, or in combination, as determined by the Owner's Representative; results of surveys/soundings by any of these methods, singularly or in combination, will be the basis for payment.
  - (3) The Contractor's hydrographic surveys for progress payment shall meet or exceed the survey standards listed in the U.S. Army Corps of Engineers EM 1110-2-1003 (Hydrographic Surveying) for Class I surveys. Surveys shall be in the World Geodetic System of 1984 (WGS84), High Precision Geodetic Network (HPGN), feet, and be performed by a hydrographic survey contractor with at least three (3) years of experience in hydrographic surveying and having either a current Land Surveyor's or a Professional Engineer's license, authorized to certify surveys in the State of California. The Hydrographic Surveyor firm selected by the Contractor must be approved by the Owner's Representative prior to performing surveys for this contract.
  - (4) Hydrographic surveys shall be conducted using an Automated Range-Azimuth Positioning System or Differential Global Positioning System (DGPS) with positional accuracy to Class I surveys or better that is linked to an automated (digital) depth recording device capable of continuous logging of x,y,z positional data with depth measurement resolution to the nearest 1/10 of a foot. Digital depths shall be supplemented by analog depth records if survey is performed by single beam echosounder. Sounding lines shall be verified by crosslines on at least 10 percent of the principal sounding lines. Distance between successive soundings (sounding interval) shall be no more than 10 feet. Soundings shall be reduced to sounding datum (NGVD29 feet) by using actual tides and other appropriate corrections resulting in an accuracy to meet or exceed Class I survey standard.
  - (5) The Contractor shall submit a tide gage plan for approval by the Owner's Representative. The plan shall include the types of gages to be deployed and the locations. All tide

gages shall be referenced to the vertical datum as shown on the plans.

2. Method of Measurement

The total amount of dredged material will be measured by computing the volume between the bottom surface shown by the surveys and/or soundings of the pre-dredge survey, and the bottom surface shown by the soundings of the post-dredge acceptance survey within the dredging limits for each of the four dredge payment zones. The drawings represent existing conditions based on current available information, but will be verified and corrected, if necessary, by surveys or soundings taken before dredging in each locality. The Triangulated Irregular Networks (TIN) made from post-processed survey soundings, representing the pre-dredge and post-dredge acceptance survey conditions, will be used for quantity determination. The dredging limits shall be subtracted from the TINs, and the pre-dredge survey difference minus the post-dredge acceptance survey difference will represent the quantity dredged. Misplaced materials (including any required removal and placement), materials placed in temporary stockpiles, and excessive dredging beyond the limits and tolerances indicated on the plans will be excluded from the quantities for which payment will be made.

3. Surveys During Progress of Work

Contract depth will be determined by soundings or sweepings taken behind the dredge as work progresses. The Contractor shall take progress soundings or sweepings and provide the resulting data to the Owner's Representative. Progress surveys shall be performed not less than biweekly when dredging in zone CB-1 to account for anticipated high initial material influx rates once a clear channel is cut through the shoal. Progress surveys shall be conducted not less than monthly for Dredge Payment in other zones. At Contractor's discretion, surveys may be conducted more frequently to better track material dredged and deposited on the beach.

The Contractor's survey shall provide full coverage of an entire area for which progress payment is being submitted plus a buffer of 300 feet around the dredging area to calculate displaced but non-exported sand volume. Contractor's hydrographic surveys shall be performed electronically (automated) and the data shall be provided and submitted to the Owner's Representative on an electronic media (IBM compatible, ASCII format) in delimited files of easting, northing, and depth (x,y,z). Three copies of the plot of the soundings will accompany the x,y,z data and all data shall be collected and plotted in foot contours with digital data extending to 10ths of feet. The independent hydrographic surveyor shall prepare a volume dredged and exported to the beach estimate and shall provide this volume estimate in a signed and stamped memorandum with the backup data.

4. Monthly Estimates

Monthly estimates of work completed will be based on the result of progress surveys made during the progress of the work. Deductions will be made for excavation/dredging not in accordance with the specifications and for sand relocated but not exported from the system.

E. Final Examination and Acceptance

As soon as practicable after the completion of payment zones, which in the opinion of the Owner's Representative, will not be affected by further dredging operations, each zone will be surveyed by the independent surveyor. The Contractor will remove shoals and lumps by dragging the bottom or by dredging as directed by the Owner's Representative. However, if the bottom is soft, removal may be waived at the discretion of the Owner's Representative. The Owner's Representative will be notified when soundings or sweepings are to be made and will be permitted to accompany the sounding or sweeping party and to inspect the data and methods used in preparing the final estimate. When areas are found to be in a satisfactory condition, the work therein will be accepted as complete. Final estimates will be subject to deductions or correction of deductions previously made because of excessive overdepth, earthwork/dredging outside or authorized areas, or disposal of material in an unauthorized manner.

After completion of the dredging and beach nourishment work, the contractor shall provide 4 copies of reproducible "As Built" drawings of the dredging and beach nourishment areas showing all spot elevations, controls, 1-foot contour lines and existing features. Drawings shall be scaled to an appropriate size and referenced to NGVD 29 in feet and data shall be presented as digital (IBM compatible, ASCII format) in delimited files of easting, northing, and depth (x,y,z).

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

Quantities of Dredging shall be based on the amounts of material removed and subsequently transported to and placed on the beach. These quantities shall be determined by comparing pre-removal surveys and post removal surveys and calculating the actual volumes of each material type that has been excavated and/or dredged to the pay depth. There will be no payment for material dredged below the pay depth. Progress surveys comparing pre- and post-removal conditions shall be the basis of all volume calculations.

Erosion repair grading, repair of stormwater outlet facilities, and repair of fencing shall be measured as percent of work complete based on estimated quantity of material moved, feet completed, etc. scaled by the total quantity of work to be performed under the bid item line.

4.2 PAYMENT

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Payment for Earthwork/Dredging shall include removal, transportation and placement to the lines and grades shown on the Drawings. Payment for excavation of Beach Sand, transportation to the designated beach sites, filling, and grading as may be needed to complete the beach configurations shown, will be paid at the unit price bid for Dredging and Placement in the Proposal and Bid. Payment for other items of work shall be based on a percent complete of lump sum bids by line item.

END OF SECTION